TIMBER COVE MARINA STORM WATER POLLUTION PREVENTION PLAN

This Storm Water Pollution Prevention Plan (SWPPP) for the Timber Cove Marina is submitted to the Lahontan Regional Water Quality Control Board (Lahontan RWQCB) in compliance with Board Order No. 6-00-36, National Pollutant Discharge Elimination System General Permit NPDES CA CAG616003, for discharges of storm water runoff associated with industrial activity at marinas on Lake Tahoe. This SWPPP has been designed to comply with Federal requirements to implement best management practices (BMPS) to achieve compliance with effluent limits and receiving water objectives.

1. Objectives

The SWPPP has been developed, and will be amended when necessary, to meet the following objectives:

- a. to identify and evaluate sources of pollutants associated with industrial activities being conducted at the facility that may affect the quality of storm water discharges and prevent non-storm water discharges from the facility; and,
- b. to identify and implement site-specific best management practices (BMPs) to reduce or prevent pollutants associated with industrial activities in storm water discharges and nonstorm water discharges.

BMPs may include a variety of pollution prevention measures or other low-cost and pollution control measures. They are generally categorized as non-structural BMPs (activity schedules, prohibitions of practices, maintenance procedures, and other low-cost measures) and as structural BMPs (treatment measures, runoff controls, overhead coverage.)

2. Planning and Organization

a. Pollution Prevention Team

The Timber Cove Marina storm water pollution prevention team consists of Bob Hassett, Marina Operator, who is responsible for overall operations and monitoring of water quality, and Andy Proscic, Service Manager, who is responsible for daily operations and employee training and supervision.

b. Other Requirements and Existing Facility Plans

The following other plans and reports for regulatory agencies are incorporated by reference into this SWPPP:

i. Timber Cove Marina Storm Water Monitoring Plan prepared for and submitted to the Lahontan RWQCB per Board Order No. 6-00-36 and National Pollutant Discharge Elimination System General Permit NPDES CA CAG616003. This plan includes

monitoring programs assure compliance with storm water discharge requirements and non-storm water discharge restrictions.

- ii. Timber Cove Marina Spill Prevention Control & Countermeasure (SPCC) Plan prepared in accordance with the provisions of 40 CFR part 112, addressing petroleum product storage and dispensing, and certified by a professional engineer. This plan includes storm water pollutant control measures associated with potential spills of petroleum products stored on-site.
- iii. Timber Cove Marina Business Plan for hazardous materials filed with the El Dorado County Environmental Management Department. This plan includes an inventory of hazardous materials used on-site, their quantity, location and handling procedures/ precautions for use to avoid environmental hazards.

3. Site Map

Figure 1 - Timber Cove Marina Layout and Surface Drainage Diagram from the SPCC Plan identifies the parking lot, above ground fuel storage tanks and oil storage locations as well as the storm water collection and treatment system. There are no municipal storm drain facilities serving the site.

The marina shares the site of the Timber Cove Lodge Motel which is a much larger facility to the south and west of the marina portion of the site. There may be some storm water run-on from the motel parking lot to the "marina parking lot" which is essentially a lakeward extension of the motel parking area. Since this parking area is used identically to the marina lot, no additional pollutants are expected to be conveyed by run-on water.

Areas of "industrial activity" include the parking lot and boat house ramp area which are used for shipping and receiving activities, and boat storage. The fuel storage tanks and oil storage shed are also located in the paved parking area.

No erodible "industrial activity" materials are directly exposed to precipitation and no significant spills or leaks have occurred.

4. List of Significant Materials

The SWPPP list of significant materials handled and stored at the site is provided in Worksheet 1 (attached following this narrative).

5. Description of Potential Pollutant Sources

The "industrial activity" occurring at the marina is the fueling, operation and maintenance of water craft (see Worksheet 2). Most activities, including fueling, pump-out and operation of boats occurs from the pier and cannot contribute to storm water run-off. These activities are conducted in compliance with the BMPs listed in Attachments F and G from the General Permit. The entire fuel storage and delivery system is double-walled and meets current codes for such facilities. The required SPCC Plan and been prepared and implemented.

Boat repair and maintenance occurs either within the boat house (major work) or within the floating boat. Both locations allow the containment of any spills which are then properly cleaned-up and clean-up materials properly disposed of. A boat hoist allows boats to be easily launched/removed from the water into the boat house for repairs. Storm water does not affect these repair and maintenance locations.

Activities with a potential to contribute pollutants to storm water discharges are those which occur in the parking lot: fuel deliveries to the fuel storage tanks, delivery or removal of oil stored in the storage shed, and boat washing. Spill prevention measures and procedures for the stored petroleum products are fully described in the SPCC Plan. Boat washing uses biodegradable detergents which flow into the on-site storm water treatment facilities. Employees are careful to not allow wash water flow to the lake.

The parking lot can also collect oil and sands deposited by vehicles parked in the lot. These pollutants could be then washed off with storm water. These materials are routed through the primary on-site treatment facilities (sand/oil separator) which separate the pollutants from the water which then receives secondary treatment and is infiltrated in the basin.

Except for fuel and oil, no significant materials are stored at the marina. No significant dust or particle generating activities are conducted at the marina. No significant leaks have occurred at the marina.

No soil erosion occurs due to industrial activity. Landward activities occur on a paved parking lot with permanent drainage facilities, including run-off treatment BMPs consistent with Lahontan RWQCB standards for the Lake Tahoe Basin. Parking lot run-off flows to 2,000 gallon sand/oil separator and into an approximately 13,750 gallon infiltration/treatment basin. These BMPs are monitored and maintained pursuant to an approved schedule. Parking barriers eliminate vehicle travel off the paved surface, to minimize tracking of sand and sediments onto the parking lot.

6. Assessment of Potential Pollutant Sources

Potential pollutant sources and BMPs are identified in the narrative above and Worksheet 2.

7. Storm Water Best Management Practices

The existing storm water BMPs on-site include the paved parking area, storm water collection and treatment facilities. Treatment includes a sand/oil separator vault (2,000 gallons) and a retention/infiltration treatment basin. Together these BMPs provide treatment for all potential pollutants from the parking lot: sand, oil, and wash water. These structural BMP were sized, designed, approved and constructed pursuant to the regulations of the Lahontan RWQCB. No additional structural BMPs are planned.

In addition, non-structural BMPs, consisting of the following processes, prohibitions, procedures, schedule of activities, *etc.*, that prevent pollutants associated with industrial activity from contacting with storm water discharges and authorized non-storm water discharges, have been considered and adopted:

- a. Good Housekeeping Good housekeeping generally consists of practical procedures to maintain a clean and orderly facility. The parking lot and all other areas (fuel dock, boat launch hoist, *etc.*) with the potential to release pollutants to storm water or directly to Lake Tahoe are kept orderly and clean.
- b. Preventive Maintenance Preventive maintenance includes the regular inspection and maintenance of structural storm water controls (catch basins, oil/water separators, *etc.*) as well as other facility equipment and systems. The sand/oil separator receives regular inspection and maintenance (2x year) per a prescribed maintenance schedule. The infiltration basin and other components of the drainage system are monitored per the prescribed schedule in the Timber Cove Marina Monitoring Plan as required by the General Permit.
- c. Spill Response This includes spill clean-up procedures and necessary clean-up equipment based upon the quantities and locations of significant materials that may spill or leak. Two spill response plans have been developed and implemented at the marina: a spill contingency plan consistent with the requirements of the Lahontan RWQCB and an SPCC Plan consistent with the requirements on facilities with significant above ground fuel storage (40 CFR part 112).
- d. Material Handling and Storage This includes all procedures to minimize the potential for spills and leaks and to minimize exposure of significant materials to storm water and authorized non-storm water discharges. Petroleum products are stored with double containment and the fuel dispensing system is entirely double-walled. No other significant materials are stored or handled at the marina.
- e. Employee Training This includes training of personnel who are responsible for (1) implementing activities identified in the SWPPP, (2) conducting inspections, sampling, and visual observations, and (3) managing storm water. All new hires are instructed in spill prevention, spill response and clean-up, and spill reporting at the beginning of their employment. Walk-through inspections of marina facilities are conducted weekly and used as continuing training sessions for employees.
- f. Waste Handling/Recycling This includes the procedures or processes to handle, store, or dispose of waste materials or recyclable materials. Used oil and spill clean-up materials are collected and disposed of by a licensed waste hauler/recycler.
- g. Record Keeping and Internal Reporting This includes the procedures to ensure that all records of inspections, spills, maintenance activities, corrective actions, visual observations, *etc.*, are developed, retained, and provided, as necessary, to the appropriate facility personnel. Inspection checklists have been included with the Monitoring Plan and SPCC Plan to provide records of inspections completed, any problems found and actions taken to fix those problems. Records are kept on-site in the marina office.
- h. Erosion Control and Site Stabilization This includes a description of all sediment and erosion control activities. "Industrial activities" subject to storm water run-off are limited to the paved parking lot. The paved surface stabilizes this portion of the site.

- i. Inspections This includes, in addition to the preventative maintenance inspections identified above, an inspection schedule of all potential pollutant sources. The fuel tanks and oil storage shed are the pollutant sources located on-site. These are inspected, and any required corrections made, in accordance with the SPCC Plan.
- j. Quality Assurance This includes the procedures to ensure that all elements of the SWPPP and Monitoring Program are adequately conducted. Quality assurance is implemented by the Marina Operator who oversees all operations at the marina.

8. Annual Comprehensive Site Compliance Evaluation

Annual comprehensive site compliance evaluations are completed in the Fall in conjunction with the annual reporting requirement of the General Permit and Spring during the site visit inspection by Lahontan RWQCB staff. The Annual Report provides a written record of inspections, evaluations and activities at the marina. It also provides certification that the facility operator is in compliance with the General Permit. If the certification cannot be provided, this is explained in the Annual Report.

9. SWPPP General Requirements

The following general requirements for all SWPPPs are established by the Lahontan RWQCB:

- a. The SWPPP shall be retained on site and made available upon request of a representative of the Regional Board.
- b. The SWPPP shall identify the existing storm water BMPs already in place at the marina [see Sec. 7 above] and new BMPs [none] that are needed at the marina in order to further reduce and prevent pollutants in storm water and non-storm water discharges. The new BMPs that are identified by the marina operator in the SWPPP shall be implemented by October 15, 2003.
- c. The Regional Board may notify the facility operator when the SWPPP does not meet one or more of the minimum requirements of this section. As requested by the Regional Board the facility operator shall submit a SWPPP revision and implementation schedule that meets the minimum requirements of this Section to the Regional Board. Within 14 days after implementing the required SWPPP revisions, the facility operator shall provide written certification to the Regional Board that the revisions have been implemented.
- d. The SWPPP shall be revised, as appropriate, and implemented prior to changes in industrial activities which (i) may significantly increase the quantities of pollutants in storm water discharge, (ii) cause a new area of industrial activity at the facility to be exposed to storm water, or (iii) begin an industrial activity which would introduce a new pollutant source at the facility.
- e. The SWPPP should also be amended if it is in violation of any condition of this General Permit, or has not achieved the general objectives of controlling pollutants in storm water discharges. The amended SWPPP shall be submitted no later than 30 days after the

determination of violation or non-achievement to the Regional Board Executive Officer for review and approval.

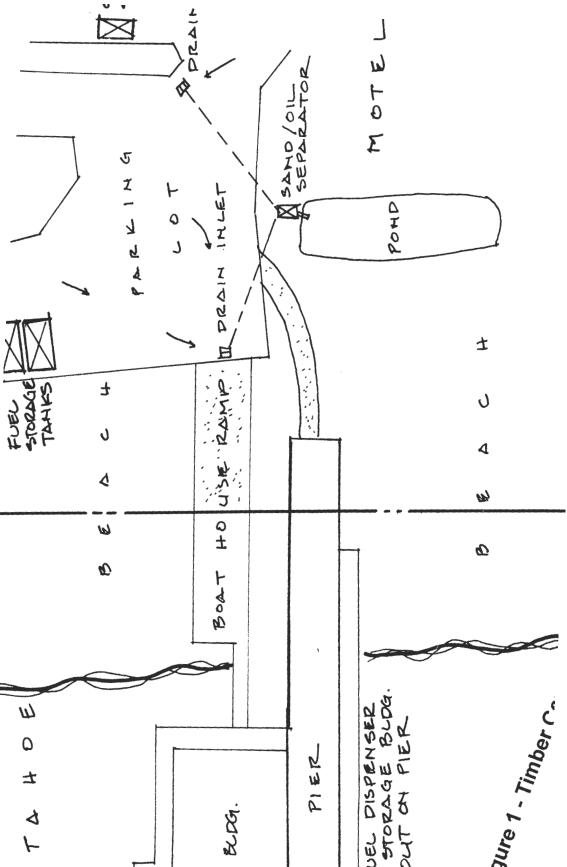
10. Public Access

The SWPPP is considered a report that shall be available to the public under Section 308(b) of the Clean Water Act. Upon request by members of the public, the marina operator shall make available for review a copy of the SWPPP directly to the requester.

11. Preparer

Signature:

This SWPPP was prepared by: Jay Kniep, AICP, Consultant/Agent for Marina	Operator	and
initially submitted to the Regional Board on November 15, 2000.		



WORKSHEET 1

LIST OF SIGNIFICANT MATERIALS HANDLED AND STORED AT THE SITE

Instructions: List all the materials stored and handled onsite. Assess and evaluate these materials for their potential to contribute pollutants to storm water runoff. Also complete Worksheet 3 if the material has been exposed in the last 3 years.

Disposal	n/a	Oil Disposal Co.			
Frequency	Summer Season	Summer Season			
Handled	Fuel Dock on Pier	in Boat Engine Compartments			
Stored	2 ASTs in Parking Lot	Oil Storage Shed in Parking Lot			
Quantity	2,000 gal.	220 gal.			
Purpose/Use	Boat Fuel	Boat Engine Lubrication			
Material	Unleaded Gasoline	Lubricating Oil			

Indicate on the site map where these materials are stored, handled, and disposed. Also indicate if materials are exposed to precipitation or if materials are within the path of storm water runoff.

	Date:
	0
	Jay Knien
Worksheet 1	Prepared by:

November 15, 2000

WORKSHEET 2

ASSESSMENT OF POTENTIAL POLLUTANT SOURCES AND CORRESPONDING BEST MANAGEMENT PRACTICES

Management Practices implemented onsite (i.e., non-structural BMPs-good housekeeping, preventive maintenance, spill response, Instructions: Provide a summary of all areas of industrial activities, potential pollutant sources, and potential pollutants. Also include the Best daily site inspections or structural BMPs-overhead coverage, secondary containment structures, etc.) to prevent pollutants from entering storm water or surface waters.

Activity	Location of Activity	Pollutant Source	Pollutant	Applicable Best Management Practice (BMP)
Boat Fueling	Fuel Dock on Pier	Spills/Leaks During Fueling	Fuel, Oil	-Only trained employees operate fuel dispenser -Absorbent materials available to clean-up -BMPs in Attachment F
Fuel/Oil Storage	Parking Lot	Spills/Leaks During Delivery/Removal or from Storage Container	Fuel, Oil	-Double contained storage -Delivery/removal by trained personnel -SPCC plan in place
Boat Maintenance/Repair	In Boat or In Boat House	Spills/Leaks During Repair	Fuel, Oil, Maintenance or Repair Materials	-Activity in contained area: boat itself or enclosed boat house -Absorbent materials available on-site
Boat Washing	Parking Lot	Wash Water	Wash Water	-Conduct where water drains to drain/treatment system -Use biodegradable detergent

Worksheet 2 Prepared by: Jay Kniep

Date: November 15, 2000